LAWRENCEBURG
MUNICIPAL UTILITIES
Electric / Water / Sanitation

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January 13, 2003

Mr. William D. McCarty
Indiana Utility Regulatory Commission
302 W. Washington Street, Suite E-306
Indianapolis, IN 46204-2764

Re: Electric Service Quality Rulemaking Data Request

Dear Mr. McCarty:

Enclosed is the above referenced data, which has been requested by the IURC. Please contact me if I can be of any further assistance.

On Behalf of our Customer-Owners,

C.M. Davis
Utility Director

mla

Cc: Kristin Kern Wheeler
File

Lawrenceburg Municipal Utilities

Electric Service Quality Rulemaking
Data Request

Reliability:
The area of reliability will include the examination of sustained outages, momentary outages, restoration of service following a sustained outage and power quality.

1. Is your utility participating in any EPRI (or other organizations) research projects relating to reliability or other service quality issues? If yes, please describe the project(s) you are involved in and how it relates to reliability issues addressed in this section of the data request.

Service Interruption and Outages

Sustained Outages:

1. How does your utility identify an outage? At what point does your utility consider an outage a "sustained" outage versus a "momentary" outage?
When a line or transformer fuse is blown, when a recloser "locks out" or when a conductor is broken.

2. Please describe the response process once an outage is identified. Has our response process changed in any way over the past 5 years? Please explain those changes. What follow-up is done after service has been restored to determine that an individual customer, once again, has electric service?
Crew or crews are dispatched; determine problem, and complete repairs. Do not know how the response process might have changed, I have only been employed here for four months.
After service has been restored we visit customers, to make sure that their service is restored.

3. Under what conditions or circumstances does your utility report an outage to the Commission? Since January 2001, how often have you reported an outage to the Commission? How often did you provide updates on the outage and the restoration of service?
Due to my short tenure at Lawrenceburg, I was not aware that outages had to be reported.

4. Outages resulting from major weather events can somewhat be anticipated, please describe the weather event outage response form the time a weather situation is know or anticipated to exist through the time the last customer is brought back online. Please describe any facilities

and/or procedures that are specifically used in anticipation or during a major weather event in case of widespread outages. Are the facilities and/or procedures different depending on the type of weather event, for example tornado conditions versus a potential ice storm? Are there non-weather related outage situations when these facilities and/or procedures are used?
If a weather-related situation is anticipated, the crew would be put on notice to make sure that all motorized equipment is fueled and prepared to operate for extended periods.
All critical need customer lists would be checked for accuracy and facilities that back up generation would be notified.
Procedures would be different if a tornado would be anticipated.

5. What other governmental (local, state, federal) agencies or organizations must your utility interact or communicate with during outage situations? Specifically, are there other agencies or organizations that your utility is required by law or regulation to report to or communicate with during outage situations?
The governmental agencies that we would notify are: Fire Dept., Police Dept., Hospital, and County Emergency Response Agency, The Indiana Municipal Power Agency.

6. Are there other agencies, organizations or companies that your utility typically interacts or communicates with during critical outage situations? Please describe the circumstances and types of interactions or communications that occur.
(answer is the same as #5.)

7. What is the policy concerning the use of service crews form other utilities? Has the availability of crews or the willingness of other utilities to make crews available become more limited in recent year? Are non-utility crews being used or considered more routinely than requesting crews form neighboring utilities?
The City of Lawrenceburg participates with other municipal electric utilities in mutual aid agreements.

8. What type of information does your utility typically gather/report/analyze regarding sustained outages? How is this information used in the utility?
Use information to analyze cause of outages. If the cause can be corrected, we would make every effort to correct the situation.

9. Does the utility attempt to quantify the financial costs of outages to customers and local communities? If so, please explain how this is done.
We total labor and material costs.

Momentary Outages:

1. Does your utility identify and tract momentary outages? How is a momentary outage identified and/or defined?
Only if we get complaints. Momentary outages are a recloser operation prior to lockout.

2. What type of information does our utility typically gather/report/analyze regarding momentary outages? How is this information used in the utility?
No.

3. Other than the duration of the outage, are there operational or characteristic differences in a sustained outage versus a momentary outage?
Yes, blown fuse, recloser "lock-out" or broken or downed conductor.

Performance Measures and Statistics

1. Typically reliability performance statistics include SAIDI, CAIDI, SAIFI, ETC. Does your utility routinely calculate these statistics? How is each of the variables in each of the calculations defined? Are these statistics calculates as part of your outage management system or through some other means?
Not at the present time.

2. Are there other reliability statistics your utility calculates? What are they? How are they calculated? How are the variables used to calculate them defined? Are these statistics calculated as part of your outage management system or through some other means?
No.

3. Does your outage management system calculate other reliability statistics that your utility does not routinely review? What are these statistics? How are they calculated? How are the variables used to calculate them defined?
No.

4. Reliability statistics are often calculated excluding storms or other major outage events. What are the advantages and disadvantages to excluding storms or major outage events? If these events are excluded, how do you determine when to exclude an outage event? How do you define the different levels of outage events?

Storms or other nature caused outages are beyond human control and should be excluded form statistics.

5. How do service territory differences (e.g., rural versus metropolitan, high industrial concentration versus more residential) affect the calculation of reliability statistics? What statistic, if any, is most indifferent to the service area characteristics, in other words what statistic(s) would most likely allow relevant comparisons among a wide variety of utility types?
High customer densities affect some of the calculations. CAIDI is the least customer sensitive.

6. Can the calculation of reliability indices be standardized among Indiana utilities? Please explain how that might be done.
Yes, the number of outages per circuit and response time.

7. Should utility size or other characteristics be taken into consideration when evaluating the reliability statistics from a company?
No.

8. Are performance evaluations and the resulting compensation for any individual, groups of individuals or divisions of the utility tied to reliability statistic results? Please explain what reliability statistics are used and who is evaluated based on the results of those statistics. How are the acceptable levels of performance set and what are those levels?
No.

Worst Circuits

In order to prevent utilities from having "pockets" of poor service reliability, some state commissions require utilities to report the top 10-25 worst circuits and then address those problem areas.

1. Are these areas of your utility's service territory that are more prone to outages, either sustained or momentary, or other reliability problems, such as power quality, than others? How does your utility address this type of problem?
No.

2. What are the advantages of identifying the top worst performing circuits of a utility?
Advantages are having information to direct resources to the areas of need.

3. What are the disadvantages of identifying the top worst performing circuits of a utility?
There are no disadvantages

Power Quality

1. Based on your utility's interaction with its customers, is power quality an important concern of your customers? What aspects of power quality are of particular concern (voltage sag, high or low voltage, voltage spikes and transients, flickers, surges, harmonics, other)? Please explain. Are there typical types of customers or customer classes that voice a greater concern about power quality than others? Please explain. How has your utility addressed these concerns?
Power quality is a concern to our customers. Industrial and commercial customers are more sensitive.

2. Does your utility have any program or plan in pace specifically addressing power quality issues? Please explain. How have these programs or plans changed over the last five years?
If a customer has concerns about power quality issues we monitor his connection at the transformer and on the customer side of the meter. If problems are discovered we explain to the customer and offer possible solutions.

3. Does your utility collect/track any type of power quality related date? If so, what data is collected and how is it used by the utility?
No.

4. Is power quality data used as a performance measure for compensation for any person(s), groups and/or divisions in your utility? Please explain what data is used and why.
No.

Leading Indicators

While it is important to restore service as quickly as possible following an outage, when practical, it is better to present the outage form occurring.

1. What are good leading indicators of possible service outages? Does your utility routinely monitor specific aspects of the electric operations or system with the goal of preventing service outages? What do you monitor and why?
Good leading indicators of service outages are blinking lights; burning tree limbs, overloads of conductors or circuits.
We monitor substation breakers and check loading on circuits.

2. Does your utility have a routine inspection and maintenance plan/procedure in place designed to prevent the possibility of service outages? Please explain the plan/procedure.
No.

3. Has this plan/procedure changed in the past five (5) years? Please explain the changes and why they were made.
No.

4. Has your utility made any study or analysis as to how successful your inspection and maintenance plan/procedure has been in preventing service outage? Please explain.
No.

5. Does your utility have a vegetation management plan/procedure in place designed to prevent the possibility of service outages? Please explain the plan/procedure.
Yes, we patrol circuits and attempt to provide proper tree clearance.

6. Has this plan/procedure changed in the past five (5) years? Please explain the changes and why they were made.
No.

7. Has your utility made any study or analysis as to how successful your vegetation management plan/procedure has been in preventing service outage? Please explain.
No.

8. Does your utility identify/track the age of equipment used in the production and delivery of electricity to the customer? Why or why not?
No. We are going to implement a procedure after our voltage conversion is complete.

9. Could equipment age be used as a leading indicator of potential service outages? Would this be an effective indicator of potential service outages? Please explain.
It could be if proper equipment maintenance procedures are not used.

10. Does your utility track equipment used in the production and delivery of electricity to the customer to identify equipment that tends to have a premature or unpredicted failure rate or degraded performance level? Why or why not?
Yes. We have experienced some pre-mature failures in lightning arrestors and some types of transformers.

11. Could the identification of equipment with premature or unpredicted failure rate or degraded performance level be used as a leading indicator of potential service outages? Would this be an effective indicator of potential service outages? Please explain.
Yes.

12. Are there any other methods (e.g., infra-red inspections or radio frequency inspections) you carry out to help maintain and/or improve system reliability? Please describe the methods you use.
We have used infrared inspections in some areas.

Setting Performance Standards

1. Does your utility set any type of performance standards relating to service reliability and quality as a method of determining employee and/or division performance for compensation purposes? What are these standards? How are they measured? How do they affect the overall compensation for a(n) employee and/or division?
Not at present.

2. Could similar standards be set by the Commission to help evaluate and compare the service quality of Indiana utilities? Please explain why or why not.

3. If these standards are not appropriate to help evaluate and compare the service quality of Indiana utilities, please suggest some standards that would be appropriate.

4. To date there has been little or no use of I.C. 8-1-2.5 by utilities to propose performance based rates that would tie utility incentives/penalties to reliability and other measurable performance criteria. Is there a problem with how I.C. 8-1-2.5 is structured that makes it inappropriate or ineffective as a vehicle for performance based rates? Please explain. From your perspective (utility, customer group, other) what are the pros and cons of performance based rates?

Safety:

1. Is your utility participating in any EPRI (or other organizations) research projects relating to safety? If yes, please describe the project(s) you are involved in and how it relates to safety issues addressed in this section of the data request.
No.

2. What actions to ensure public safety are taken, both by the utility and other emergency resources, when a live power line has come down?

Please explain the activities form the time a live power line is reported down until it has been repaired or rendered safe.
Once a live power line is reported down, the first responder clears the area and tries to determine what action needs to be taken to de-energize the conductor. The second responder or crew de-energizes the conductor and makes the necessary repairs.

3. In situations where live power lines may be down in multiple locations, how is public safety ensured?
We utilize the safety forces to keep the area clear.

4. In critical weather situations where widespread areas may experience outages or down power lines, is there any central coordination (beyond each individual utility) of the restoration of service and the repair of down lines? Please explain who does the coordination and what organizations are involved.
No.

5. What could be done to improve the public awareness of the hazards that may exist as a result of weather related power outage? How does your utility inform customers of these types of hazards?
Education. We are going to re-institute safety tips in a newsletter and attempt to provide safety education for elementary age children.

6. What is the most typical accident involving utility facilities that happens to utility personnel and to non-utility/customers/the general public? What has your utility done to help try and alleviate these types of accidents?
To non-utility personnel vehicle – pole accidents

7. What is the current average term of employment for service and line crew personnel? Does your utility provide on-going safety training for your line and service crews? Please explain the types of training these crews receive.
12.8 years is the current average term of employment for line crew personnel.

8. Commission rules currently require utilities to report accidents resulting in death. Do you think this rule provides useful information to the Commission? Please explain. Do you have any recommended changes that would make this rule more useful? Please explain.

It does provide useful information, if that information is then made available to all electric utilities along with conclusions from the accident investigations.

9. What other organizations or agencies must you report to when there has been an accident, injury or fatality? Please explain what must be reported, under what circumstances and in what time frame from when the incident occurred.
Indiana Municipal Power Agency and Indiana Municipal Electric Association

10. The Commission is aware that in preparation for Y2K utilities developed emergency operating plans (EOP). Does your utility continue to maintain and update an emergency operating plan? What circumstances or conditions is the EOP designed to cover? Is the EOP prepared and/or modified completely by utility personnel or do other organizations or agencies have input to the plan? Please explain how outside sources have input to the EOP. Does your utility routinely run drills on the EOP to check the effectiveness of the plan and to identify areas, which need improvement? Please describe your drilling procedure.
Not to this point. New rules and procedures will be developed as my time of employment increases.

Customer Service:

1. Is your utility participating in any EPRI (or other organizations) research projects relating to customer service? If yes, please describe the project(s) you are involved in and how it relates to customer service issues addressed in this section of the data request.
No.

2. Please describe your utility's customer service philosophy and how your utility implements this philosophy.
Assist the customer with their problems or concern.

3. How many employees are directly engaged in customer service types of activities and where do they fit in the utility's overall organizational structure? An organizational diagram may be useful in responding to this question.
All of our employees.

4. Assuming there are a variety of activities that can be considered "customer service" please describe the different types of activities your utility

classifies as "customer service" and how many employees are engaged in each activity.
All of our activities relate to customer service.

5. Please provide a brief description of the qualifications required by employees engaged in the various customer service activities described in response to the previous question. Have these requirements and protocols changed over the past five years? Please explain.
We are going to implement customer service education for all new employees.

6. Please describe any equipment and/or facilities that are specifically designed to help the utility to communicate with its customers and to enhance customer service.
Newsletter

7. How does your utility evaluate the quality and performance of your customer service activities?
Unknown

8. Is the compensation of employees, groups of employees or divisions ties to customer service performance? Please explain how this is done and whom this process affects.
No

9. What methods or statistics are used to evaluate customer service performance? Please provide a description of the methods or statistics used.
None